

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office	Docket No.: INTEL1250-1 (P13830X)	Serial No.: 10/672,149
	Applicants: Chan, et al.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Filing Date: September 26, 2003	Group Art Unit: 1632

U.S. PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
CW	A	6,514,767	2/4/03	Michael Natan	436	166	
CW	B	6,608,716	8/19/03	Safonov, et al.			
CW	C	2002/058273	5/16/02	Edward Shipwash			
CW	D	2003/058799	3/27/03	Berlin, et al.			

FOREIGN PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION (YES/NO)

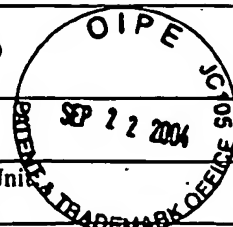
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)

CW	E	Doering, et al., "Spectroscopic Tags Using Dye-Embedded Nanoparticles and Surface-Enhanced Raman Scattering", <i>Analytical Chemistry</i> , 75 75(22) 6171-6176, (2003)
CW	F	Kneip, et al., "Detection and Identification of a Single DNA Base Molecule Using Surface-Enhanced Raman Scattering (SERS)" <i>Physical Review E. Statistical Physics</i> , 57(6):R6281-R6284, (1998).
CW	G	Stephan, et al., "Towards a General Procedure for Sequencing Single DNA Molecules", <i>J. of Biotechnology</i> , 86(3):255-267 (2001).
CW	H	Mulvaney, et al., "Glass-Coated, Analyte-Tagged Nanoparticles: A New Tagging System Based on Detection with Surface-Enhanced Raman Scattering", <i>Am Chem Soc.</i> 19:4784-4790 (2003).
CW	I	Vo-Dinh, et al., "Surface-Enhanced Raman Spectroscopy Using Metallic Nanostructures," <i>Trac. Trends in Anal. Chem.</i> 17(8-9):557-582 (1998).

EXAMINER GT6432089.1 1090132-27	DATE CONSIDERED 9/14/2005
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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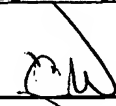






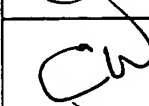
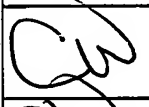

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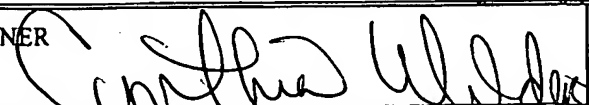
	AA	Anderson, J.R. et al., "Fabrication of Topologically Complex Three-Dimensional Microfluidic Systems in PDMS by Rapid Prototyping", <i>Anal. Chem.</i> Vol. 72, No. 14, pp. 3158-3164, 2000.
	AB	Bennink, M.L. et al., "Single-Molecule Manipulation of Double-Stranded DNA Using Optical Tweezers: Interaction studies of DNA with RecA and YOYO-1", <i>Cytometry</i> , Vol. 36, pp. 200-208, 1999.
	AC	Craighead, H.G., "Nanoelectromechanical Systems", <i>Science</i> , Vol. 290, pp. 1532-1535, 2000.
	AD	Dörre, K. et al, "Techniques for single molecule sequencing", <i>Bioimaging</i> , Vol. 5, pp. 139-152, 1997.
	AE	Effenhauser, C.S. et al., "High-Speed Separation of Antisense Oligonucleotides on a Micromachined Capillary Electrophoresis Device", <i>Anal. Chem.</i> , Vol. 66, No. 18, pp. 2949-2953, 1994.

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	AF	Goodman, M.F. and Tippin, B., "The Expanding Polymerase Universe", <i>Molecular Cell Biology</i> , Vol. 1, No. 2, pp. 101-109, 2000.
	AG	Harrison, D.J. et al., "Micromachining a Miniaturized Capillary Electrophoresis-Based Chemical Analysis System on a Chip", <i>Science</i> , Vol. 261, pp. 895-897, 1993.
	AH	Holmström, K. et al., "A Highly Sensitive and Fast Nonradioactive Method for Detection of Polymerase Chain Reaction Products", <i>Anal. Biochem.</i> , Vol. 209, pp. 278-283, 1993.
	AI	Mehta, A.D. et al., "Single-Molecule Biomechanics with Optical Methods", <i>Science</i> , Vol. 283, pp. 1689-1695, 1999.
	AJ	Newton, C.R. et al., "The production of PCR products with 5' single-stranded tails using primers that incorporate novel phosphoramidite intermediates", <i>Nucleic Acids Research</i> , Vol. 21, No. 5, pp. 1155-1162, 1993.
	AK	Rasmussen, S.R. et al., "Covalent Immobilization of DNA onto Polystyrene Microwells: The Molecules Are Only Bound at the 5' End", <i>Anal. Biochem.</i> , Vol. 198, pp. 138-132, 1991.
	AL	Running, J.A. and Urdea, M.S., "A Procedure for Productive Coupling of Synthetic Oligonucleotides to Polystyrene Microtiter Wells for Hybridization Capture", <i>BioTechniques</i> , Vol. 8, No. 3, pp. 276-277, 1990.
	AM	Smith, S.P. et al., "Inexpensive optical tweezers for undergraduate laboratories", <i>Am. J. Phys.</i> , Vol. 67, pp. 26-35, 1999.
	AN	Walker, L.M. et al., "Mechanical manipulation of bone and cartilage cells with 'optical tweezers'", <i>FEBS Lett.</i> , Vol 459, pp. 39-42, 2000.
	AO	Woolley, A.T. and Mathies, R.A., "Ultra-high-speed DNA fragment separations using microfabricated capillary array electrophoresis chips", <i>Proc. Natl. Acad. Sci.</i> , Vol. 19, pp. 11348-11352, 1994.

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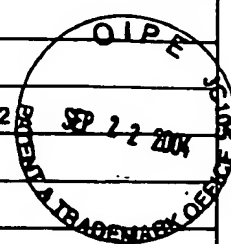
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Substitute for form 1449A/PTO (modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if known	
				Application Number	10/108,128
Sheet 1 of 2				Filing Date	March 26, 2002
				First Named Inventor	Selena Chan
				Group Art Unit	1712
				Examiner Name	Not yet assigned
				Attorney Docket Number	042390.P13830



U.S. PATENT DOCUMENTS

Examiner Initials	Cite No. ¹	U.S. Patent Document Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Figures Appear
cu		4,962,037		Jett, et al.	10/09/1990	
		5,306,403		Vo-Dinh	04/26/1994	
		5,405,747		Jett, et al.	04/11/1995	
		5,721,102		Vo-Dinh	02/24/1998	
		5,776,674		Ulmer	07/07/1998	
		5,783,389		Vo-Dinh	07/21/1998	
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		6,174,677		Vo-Dinh	01/16/2001	
		6,180,415		Schultz, et al.	01/30/2001	

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Examiner Initials*	Cite No. ¹	Office ³	Foreign Patent Number ⁴	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ⁶

Examiner Signature: *Cynthia Wilder* Date Considered: 9/14/2004

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				First Named Inventor	Selena Chan
				Group Art Unit	1712
				Examiner Name	Not yet assigned
Sheet	2	of	2	Attorney Docket Number	042390.P13830

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CW		6,210,896		Chan	04/03/2001	
		6,214,246		Craighead	04/10/2001	
		6,219,137		Vo-Dinh	04/17/2001	
		6,225,068		Wolfrum	05/01/2001	
		6,313,914		Roe	11/06/2001	
		6,344,272		Oldenburg, et al.	02/05/2002	
		6,376,177		Poponin	04/23/2002	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CW		MACHARA, N. et al., Efficient Detection of Single Molecules Eluting Off an Optically Trapped Microsphere, <i>Bioimaging</i> 6 (1998), 33-42, 1998.	
		1997 DOE Human Genome Program Contractor-Grantee Workshop VI, Pages 23-25, Retrieved from the Internet URL: < http://www.ornl.gov/hgmis/publicat/97santa/seqtech.html	
		M. SAUER, New Strategies for DNA Sequencing Using Diode Laser-Based Time-Resolved Fluorescence Detection [Retrieved on November 12, 2001]. Retrieved from the Internet URL: < http://pc-cube01.pci.uni-heidelberg.de/alt/msauer/emsproject01.hum.2 pages.	
		Lee and Meisel, <i>J. Phys. Chem.</i> 86:3391-3395, 1982	
		Goodwin et al., 1996, <i>Acc. Chem. Res.</i> 29:607-613	
		Feldheim, "Assembly of metal nanoparticle arrays using molecular bridges," The Electrochemical Society Interface, Fall, 2001, pp. 22-25	
		K. Dörre et al., "Techniques for Single Molecule Sequencing," <i>Bioimaging</i> 5 (1997) 139-152.	
		B. Dubertret et al., "Single-Mismatch Detection Using Gold-Quenched Fluorescent Oligonucleotides," <i>Nature Biotechnology</i> , Volume 19, 2001, 365-370.	
	High-Throughput Electron-Beam Lithography System, Nova Scientific, Inc, Pages 1-4, Retrieved from the Internet URL: http://www.mdatechnology.net/techsearch.asp?articleid=510		
Examiner Signature			Date Considered
			9/14/2005

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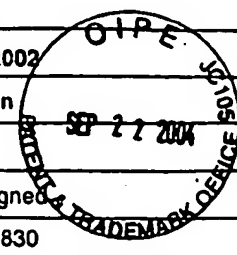
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Sheet	1	of	1		



OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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CW		Bloch <i>et al.</i> , "Optics with an atom laser beam," <i>Phys. Rev. Lett.</i> 87, 2001.	
CW		Ivanisevic <i>et al.</i> , "Dip-Pen' Nanolithography on Semiconductor Surfaces," <i>J. Am. Chem. Soc.</i> , 123: 7887-7889, 2001.	
CW		Siegel, "Ion Beam Lithography," VLSI Electronics, Microstructure Science, Vol. 16, Einspruch and Watts eds., Academic Press, New York, 1987.	
CW		Jin <i>et al.</i> , "Photoinduced Conversion of Silver Nanospheres to Nanoprisms," <i>Science</i> , 294: 1901-1903, 2001.	

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